ABSTRACT

A practical technique that enables effective utilization of organic wastes is provided. In order to achieve the above-mentioned object, a method for producing methane gas from organic wastes according to the present invention includes: treating organic wastes with at least one of supercritical water and sub-critical water to convert the organic wastes into low molecular weight substances; and subjecting the low molecular weight substances to methane fermentation. According to the method, initially, the organic wastes are treated with at least one of the supercritical water and the sub-critical water so as to be converted into low molecular weight substances that are easily subjected to methane fermentation. Then, the treated substances are subjected to methane fermentation. Consequently, methane gas can be produced from the organic wastes at a high speed with high digestion efficiency.